

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF OREGON**

GEORGE SAHM,

Plaintiff,

v.

**STL INTERNATIONAL, INC. and
COSTCO WHOLESALE
CORPORATION,**

Defendants.

Case No. 3:13-cv-0806-SI

OPINION AND ORDER

Todd A. Bradley and William A. Gaylord, GAYLORD EYERMAN BRADLEY, P.C., 1400 S.W. Montgomery Street, Portland, OR 97201. Of Attorneys for Plaintiff.

Mark P. Scheer, Dennis G. Woods, and Andrew T. Gust, SCHEER & ZEHNDER LLP, 101 SW Main Street, Suite 1600, Portland, OR 97204. Of Attorneys for Defendants.

Michael H. Simon, District Judge.

Plaintiff purchased an inversion table manufactured by Defendant STL International, Inc. (“STL”) and sold by Defendant Costco Wholesale Corporation (“Costco”) (collectively, “Defendants”). A few days later, Plaintiff was injured when he fell from the inversion table while it was fully inverted. Plaintiff filed suit in the Circuit Court of the State of Oregon for the County of Multnomah, alleging claims for strict products liability and negligence. Costco timely

removed the case to this Court. Before the Court is Defendants’ motion for summary judgment. For the reasons discussed below, Defendants’ motion is granted in part and denied in part.

STANDARDS

A party is entitled to summary judgment if the “movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). The moving party has the burden of establishing the absence of a genuine dispute of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). The court must view the evidence in the light most favorable to the non-movant and draw all reasonable inferences in the non-movant’s favor. *Clicks Billiards Inc. v. Sixshooters Inc.*, 251 F.3d 1252, 1257 (9th Cir. 2001). Although “[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge . . . ruling on a motion for summary judgment,” the “mere existence of a scintilla of evidence in support of the plaintiff’s position [is] insufficient” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252, 255 (1986). “Where the record taken as a whole could not lead a rational trier of fact to find for the non-moving party, there is no genuine issue for trial.” *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986) (citation and quotation marks omitted).

BACKGROUND

A. Plaintiff’s Inversion Table

On April 9, 2011, Plaintiff purchased an STL InvertAlign 4 Inversion Table (“InvertAlign”) at Costco. The InvertAlign has an “A-frame” construction with a bed on which a user lies and a main shaft that contains the “ankle locking mechanism” or “ankle clamping mechanism.” This mechanism is the component that is alleged to be defective and to have failed during Plaintiff’s sit-up maneuver. The ankle locking mechanism consists of foot pedals on which the user’s feet rest, “C” clamps that sit behind each of the user’s ankles, foam-padded

rollers that rest against the user's ankles during use, and a gear and pin ratchet-like locking mechanism. The gear plates consist of a series of raised "teeth" that have rounded "peaks" at the top, with a "valley" between them that is also rounded. Within the handle of the ankle locking mechanism are two springs that are connected to a pin. When the handle is depressed, the pin is raised so the user can move the clamp forward or backward along the gear plates, making the foam rollers and "C" clamps tighter or looser against the user's ankles. To lock the "C" clamps and foam rollers into place, the pin is supposed to lock into a "valley" of the gear teeth when the user releases the handle.

The InvertAlign has a "triple lock" system. The spring pin seating in the valley is the first lock. The design of the gear teeth, designed so that movement by the user should cause the pin to drop into a valley if it is not already properly seated in the valley, is the second lock. The third lock is the "gravity" lock, which engages when the InvertAlign is inverted past 45 degrees and applies pressure to the pin to hold it in place.

B. Plaintiff's Injury

On the day he purchased his InvertAlign, April 9, 2011, Plaintiff and his wife assembled the InvertAlign at their home. Included with Plaintiff's InvertAlign were a set of assembly instructions, an Owner's Manual, and an instructional DVD. Before using their InvertAlign, Plaintiff and his wife read all of the instructions and watched the DVD.

Plaintiff first used his InvertAlign on April 9, 2011. He confirmed that all the settings on the table were correct before using his InvertAlign for the first time. He set the InvertAlign for only a partial inversion and used it for approximately 10-15 minutes. On April 10, 2011, Plaintiff again used his InvertAlign. This time he fully inverted, hung, and then performed a series of inverted sit-ups. On April 11, 2011, Plaintiff used his InvertAlign for the third time. He fully inverted and stretched. He did not perform any sit-ups.

On April 12, 2011, Plaintiff used his InvertAlign for the fourth time. Before using his InvertAlign, he checked that the settings were correct. Plaintiff also states that he followed the manufacturer's instructions for mounting the InvertAlign and securing his ankles. He then tilted into a full inversion, hung upside down for a minute or two, and began to perform a "plank" sit-up, at which time his ankles unexpectedly released from the ankle lock mechanism. This caused Plaintiff to fall to the ground, resulting in his injury.

DISCUSSION

Defendants argue that summary judgment is appropriate in this case because Plaintiff fails to offer evidence that: (1) Plaintiff's injury was caused by a defective InvertAlign; (2) the ankle locking mechanism on Plaintiff's InvertAlign was defectively designed; (3) Defendants failed to warn or inadequately warned Plaintiff regarding the use and risks associated with the InvertAlign; (4) the ankle locking mechanism on the Inversion Table was defectively constructed or manufactured; and (5) Defendants did not adequately test the ankle locking mechanism on Plaintiff's InvertAlign. At oral argument, Plaintiff agreed to dismiss his theories based on failure to warn (or inadequate warning or instruction), defective manufacturing or construction, and failure to test. Plaintiff also agreed to dismiss his negligence claim. Thus, Plaintiff's only remaining claim is for strict products liability based on allegedly defective design.

Defendant continues to argue that, in response to Defendants' motion for summary judgment, Plaintiff fails to offer evidence of either causation or defective design. Defendant also moves to exclude the testimony of Plaintiff's expert witness. The Court will first address the admissibility of the opinions offered by Plaintiff's expert.

A. Expert Testimony

1. Legal Standard

The United States Court of Appeals for the Ninth Circuit recently discussed the standard under which a district court should consider the admissibility of expert testimony. *City of*

Pomona v. SQM N. Am. Corp., 750 F.3d 1036 (9th Cir. 2014). As explained by the Ninth Circuit:

Rule 702 of the Federal Rules of Evidence provides that expert opinion evidence is admissible if: (1) the witness is sufficiently qualified as an expert by knowledge, skill, experience, training, or education; (2) the scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (3) the testimony is based on sufficient facts or data; (4) the testimony is the product of reliable principles and methods; and (5) the expert has reliably applied the relevant principles and methods to the facts of the case. Fed. R. Evid. 702.

Under *Daubert* [*v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993)] and its progeny, including *Daubert II* [*Daubert v. Merrell Dow Pharms, Inc.*, 43 F.3d 1311 (9th Cir. 1995)], a district court's inquiry into admissibility is a flexible one. *Alaska Rent-A-Car, Inc. v. Avis Budget Grp., Inc.*, 738 F.3d 960, 969 (9th Cir. 2013). In evaluating proffered expert testimony, the trial court is "a gatekeeper, not a fact finder." *Primiano v. Cook*, 598 F.3d 558, 565 (9th Cir. 2010) (citation and quotation marks omitted).

"[T]he trial court must assure that the expert testimony 'both rests on a reliable foundation and is relevant to the task at hand.'" *Id.* at 564 (quoting *Daubert*, 509 U.S. at 597). "Expert opinion testimony is relevant if the knowledge underlying it has a valid connection to the pertinent inquiry. And it is reliable if the knowledge underlying it has a reliable basis in the knowledge and experience of the relevant discipline." *Id.* at 565 (citation and internal quotation marks omitted). "Shaky but admissible evidence is to be attacked by cross examination, contrary evidence, and attention to the burden of proof, not exclusion." *Id.* at 564 (citation omitted). The judge is "supposed to screen the jury from unreliable nonsense opinions, but not exclude opinions merely because they are impeachable." *Alaska Rent-A-Car*, 738 F.3d at 969. Simply put, "[t]he district court is not tasked with deciding whether the expert is right or wrong, just whether his testimony has substance such that it would be helpful to a jury." *Id.* at 969-70.

The test of reliability is flexible. *Estate of Barabin v. AstenJohnson, Inc.*, 740 F.3d 457, 463 (9th Cir. 2014) (en banc). The court must assess the expert's reasoning or methodology, using as appropriate criteria such as testability, publication in peer-reviewed literature, known or potential error rate, and general acceptance. *Id.*; *see also Primiano*, 598 F.3d at 564. But these factors are "meant to be helpful, not definitive, and the trial court has discretion to decide how to test an expert's reliability as well as whether the testimony is reliable, based on the particular circumstances of the particular case." *Primiano*, 598 F.3d at 564 (citations and quotation marks omitted); *see also Barabin*, 740 F.3d at 463. The test "is not the correctness of the expert's conclusions but the soundness of his methodology," and when an expert meets the threshold established by Rule 702, the expert may testify and the fact finder decides how much weight to give that testimony. *Primiano*, 598 F.3d at 564-65. Challenges that go to the weight of the evidence are within the province of a fact finder, not a trial court judge. A district court should not make credibility determinations that are reserved for the jury.

Id. at 1043-44 (alterations in original).

2. Plaintiff's Expert Witness

Plaintiff submitted an expert report by Hayes + Associates, signed by Wilson C. "Toby" Hayes, Ph.D. and Erik D. Power, P.E. (the "Hayes Report") and a supplemental report by Hayes + Associates (the "Hayes Supplemental Report") that responded to Defendants' expert report. Dr. Hayes has extensive education and more than 40 years' experience in mechanical engineering and design, fall reconstruction, injury biomechanics, anatomy, and orthopedics. Dr. Hayes has a B.S. in Mechanical Engineering and an M.S. in Mechanical Engineering (Design) from Stanford University, and a Ph.D. in Theoretical and Applied Mechanics (Biomedical Engineering) from Northwestern University. Dr. Hayes has spent decades as a professor of orthopedics, bioengineering, biomechanics, and mechanical engineering at Stanford University, University of Pennsylvania, and Harvard Medical School. Dr. Hayes then served as Vice Provost for Research at Oregon State University, where he is currently an Emeritus Professor. Dr. Hayes also has served as the principal or co-principal investigator on 61 research

grants involving biomechanics, most of which involved injury biomechanics. He has authored or co-authored more than 200 peer-reviewed publications, more than 60 chapters, and two books.

Dr. Hayes was assisted by Mr. Power, who is a Registered Professional Mechanical Engineer and certified accident reconstructionist. Mr. Power has a B.S. in Mechanical Engineering and an M.S. in Mechanical Engineering (with a Biomedical Option) from Virginia Tech. He has published his research in peer-reviewed journals and worked as a Lead Engineer, contracting with the National Highway Transportation Safety Administration's Biomechanics Division.

3. The Conclusions Reached by Plaintiff's Expert Dr. Hayes

The Hayes Report concludes that Plaintiff's InvertAlign unexpectedly released Plaintiff's ankles while he was doing a sit-up maneuver from a fully inverted position, causing Plaintiff's injuries, and was defective in one or more of the following ways: (1) the InvertAlign "contained a design defect in that it allowed for the ankle locking pin to be unknowingly and precariously positioned somewhere between the bottom 'valley' and top 'peak' of the gear teeth, thus allowing the ankle locking mechanism to unexpectedly open"; (2) there were a number of low-cost alternative locking mechanisms that could have been feasibly incorporated into the design and would have eliminated the defect; and (3) there were fail-safe mechanisms that could have been feasibly incorporated into the design and that would have significantly reduced or eliminated Plaintiff's injuries. Dkt. 44-2 at 11. The Hayes Report further concludes that, "unbeknownst" to Plaintiff, the ankle locking pin on his InvertAlign was not in the "valley" of the locking mechanism and, thus, when Plaintiff began his sit-up maneuver the increased outward force caused the ankle pads to open. *Id.*

The Hayes Supplemental Report (Dkt. 44-3) responds to the opinions of Defendants' expert, Alan C. Topinka, PE (Dkt. 41-3). The Hayes Supplemental Report disagrees with

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Mr. Topinka's conclusion that it is difficult to get the ankle locking pin to balance between the "valley" and "peak" of the gear teeth, noting that Hayes + Associates was "able to repeatedly place the pin in a perched position without difficulty, using both the subject inversion table with Mr. Sahm's legs mounted in the ankle clamps . . . as well as using an exemplar ankle lock assembly with PVC piping mounted in the ankle clamps." Dkt. 44-3 at 1-2. The Hayes Supplemental Report notes that Mr. Topinka failed to report the ankle thickness of his test subjects and does not appear to have measured Plaintiff's ankles, so Mr. Topinka's opinions fail accurately to "represent the anthropometry of Mr. Sahm's lower legs." *Id.* at 2.

The Hayes Supplemental Report also opines that Mr. Topinka's assertion that a perched ankle locking pin would not remain perched during the inversion process or when the handle is moved slightly back-and-forth is unavailing because Mr. Topinka used himself as a test subject and he is 5'11" tall and weighs 200 pounds, as compared to Plaintiff, who is 5'7" tall and weighs 178 pounds. The Hayes Supplemental Report also notes that the forces generated with respect to the ankle locking mechanism vary depending on the tightness of the ankle clamp, which changes with different-sized ankles, and that the ability of the pin to resist these forces depends on whether the pin is positioned closer to the "peak" or closer to the "valley" of the gear teeth. The Hayes Supplemental Report concludes that Mr. Topinka's conclusion that a perched pin would not remain perched as Plaintiff moved into a fully inverted position is without a sound basis.

Finally, the Hayes Supplemental Report opines that Mr. Topinka's assertion that, even if the pin in Plaintiff's InvertAlign remained perched during the inversion maneuver, the force from Plaintiff's sit-up would have pushed the pin into a locked position falsely assumes that the pin on Plaintiff's InvertAlign was perched near the peak of the gear tooth. In addition, the Hayes

Supplemental Report opines that the difference in ankle thickness and overall size and weight between Plaintiff and Mr. Topinka and the difference in the speed of their respective sit-up maneuvers further weaken Mr. Topinka's assertion. The Hayes Supplemental Report concludes that the pin must have been perched in a position farther from the peak and the forces from the inversion itself were below the force necessary to release the pin, but that after Plaintiff began his sit-up, the force increased to a level above that necessary to release the pin, forcing the ankle clamp open.

4. Defendants' Challenges to the Reliability of Plaintiff's Expert Opinions

Defendants argue that the opinions of Hayes + Associates should be excluded as unreliable because the testimony is not based on sufficient facts or data, is not the product of reliable principles and methods, and does not reliably apply the relevant principles and methods to the facts of the case. Defendants do not challenge the qualifications of Dr. Hayes or Mr. Power or argue that specialized knowledge would not be helpful to the jury.

Defendants' primary argument against the reliability of the Hayes Report is that Hayes + Associates did not test the ankle locking mechanism under the conditions Plaintiff testified that he operated the Inversion Table at the time of Plaintiff's injury. Defendants assert that Hayes + Associates affixed an exemplar ankle locking mechanism to a utility table in a fully inverted position, balanced the locking pin in an unlocked position, inserted a piece of PVC pipe into the ankle clamps, and suddenly pulled on the clamp at various levels of force in an attempt to pull the clamp open. Defendants' description of the testing conducted by Hayes + Associates is incomplete.

Hayes + Associates constructed an anthropometric model, based on Plaintiff's testimony and pattern of injuries, height, weight, and the dimensions of Plaintiff's InvertAlign, to analyze the biomechanics of the incident. This model also analyzed the force exerted by Plaintiff in

hanging in an inverted position and in performing a sit-up maneuver. Hayes + Associates also: (1) inspected Plaintiff's InvertAlign; (2) inspected Plaintiff's residence; (3) watched a video that Plaintiff made of his using his InvertAlign; (4) measured Plaintiff's ankles; (5) conducted experiments on an exemplar ankle locking mechanism; (6) conducted experiments on Plaintiff's InvertAlign while Plaintiff was in the machine; and (7) watched a video of the testing conducted by Defendants' expert measuring the forces against the ankle pads. The Hayes Supplemental Report includes a photograph of the ankle locking mechanism in a perched position while Plaintiff was in his InvertAlign, as well as a photograph of the exemplar ankle lock assembly with PVC piping. Dkt. 44-3 at 2, Fig. 1. The Hayes Supplemental Report expressly notes that Plaintiff's experts were able repeatedly to place the pin in a perched position using the subject inversion table with Plaintiff's legs mounted in the ankle clamps. Notably, the Hayes Supplemental Report rebuts Defendants' expert as not properly incorporating the anthropometry of Plaintiff's lower leg, unlike the testing conducted by Hayes + Associates, which was conducted on Plaintiff's legs and on exemplars that were based on the measurement of Plaintiff's legs. Although Hayes + Associates only videotaped the force experiments conducted on the exemplar ankle locking mechanism and PVC pipe, the content of the Hayes Report and Hayes Supplemental Report show that the opinions of Hayes + Associates are based on more than just those videotaped force experiments.

An expert opinion is reliable "if the knowledge underlying it has a reliable basis in the knowledge and experience of the relevant discipline." *Pomona*, 750 F.3d at 1044 (citing *Daubert*, 509 U.S. at 565) (quotation marks omitted). The opinions by Hayes + Associates have a reliable basis in mechanical engineering and injury biomechanics. The opinions are based on

modelling, tests on Plaintiff's machine, and tests on an ankle mechanism. The opinions by Hayes + Associates are not unreliable.

Defendants also argue that because every aspect of Plaintiff's use of his InvertAlign was not included in the testing done by Hayes + Associates, all of Plaintiff's opinions are unreliable. This argument is unavailing. The Court's role is to ensure that the jury is not exposed to "unreliable nonsense opinions," not to be a factfinder or weigh the impeachability of an expert's conclusions. *Pomona*, 750 F.3d at 1044. Challenges to the nuances of the testing conducted by Hayes + Associates, such as whether the sound emitted by the ankle locking mechanism when it is perched is similar to the sound emitted when it is locked, go to the weight of the evidence, not its admissibility. Although the reports by Hayes + Associates could have been more comprehensive, such as by explaining the videotaped tests and incorporating additional force measurements, these types of attacks are for a jury to evaluate. "Shaky but admissible evidence is to be attacked by cross examination, contrary evidence, and attention to the burden of proof, not exclusion." *Id.* (citing *Daubert*, 509 U.S. at 564). The Court finds the opinions by Hayes + Associates admissible.

B. Plaintiff's Claim for Strict Products Liability for Defective Design

The Oregon legislature codified portions of Section 402A of the *Restatement (Second) of Torts* (1965) in establishing the requirements for a products liability action. ORS §§ 30.900 *et seq.*; *see also Ewen v. McLean Trucking Co.*, 300 Or. 24, 28-30 (1985) (discussing the history of the enactment of Oregon's products liability statute) (citing to Vetri, LEGISLATIVE CODIFICATION OF STRICT PRODUCTS LIABILITY LAW IN OREGON, 59 Or. L. Rev. 363 (1981)). Under Oregon law, a plaintiff may bring a "product liability civil action," which is defined as:

a civil action . . . brought against a manufacturer, distributor, seller or lessor of a product for damages for personal injury . . . arising out of:

(1) Any design, inspection, testing, manufacturing or other defect in a product;

(2) Any failure to warn regarding a product; or

(3) Any failure to properly instruct in the use of a product.

ORS § 30.900. It is a “disputable presumption” in such cases that “a product as manufactured and sold or leased is not unreasonably dangerous for its intended use.” ORS § 30.910.

One who sells or leases a product in a defective condition that is “unreasonably dangerous to the user or consumer or to the property of the user or consumer” is strictly liable for physical harm or damage to property caused by that condition, if the “seller or lessor is engaged in the business or selling or leasing such a product” and if the “product is expected to and does reach the user or consumer without substantial change in the condition in which it is sold or leased.” ORS § 30.920. Here, Plaintiff alleges a strict product liability claim based on the allegedly defective design of Plaintiff’s InvertAlign.

1. Elements of a Claim for Strict Products Liability by Defective Design

Under Oregon law:

the necessary elements of a design defect case are: (1) the sale or leasing of a product by one engaged in the business of selling or leasing such products; (2) a product that was expected to, and did, reach the user or consumer without substantial change in condition; (3) a product that, when sold, was in a defective condition unreasonably dangerous to the user or consumer; (4) injury to the user or consumer, or damage to his or her property; (5) that was caused by the product’s defective condition.

McCathern v. Toyota Motor Corp., 332 Or. 59, 77 n.15 (2001). In this case, only the third and fifth elements are in dispute—the InvertAlign’s allegedly defective condition and causation.

a. Defective condition

Oregon has codified the “consumer expectation” test for determining when a product is defective. *Id.* at 75. This test requires that a plaintiff “prove that, when the product left the defendant’s hands, the product was defective and dangerous to an extent beyond that which the ordinary consumer would have expected.” *Id.* at 79.

“Whether a product is dangerous to an extent beyond that which would be contemplated by the ordinary consumer is a factual question to be determined by the jury.” *Id.* at 77. A trial court must, however, “ensure that the evidence is sufficient for the jury to make an informed decision about what ordinary consumers expect.” *Id.* Because ORS § 30.910 creates a rebuttable presumption that a product is not defective, “a plaintiff may not rely on the bare assertion of a defect from which a jury may infer unreasonable dangerousness; rather, a party must affirmatively put forth some evidence on the issue of dangerousness before the issue may properly be submitted to a jury.” *Russell v. Deere & Co.*, 186 Or. App. 78, 83 (2003).

Consumer expectations about how some products should perform under a particular set of circumstances may, in some cases, be within the realm of jurors’ common experience. *McCathern*, 332 Or. at 78. In other cases, however, the products or circumstances involved may be such that the average person would not know what to expect. *Id.* “When a jury is unequipped, either by general background or by facts supplied in the record, to decide whether [a product] failed to perform as safely as an ordinary consumer would have expected . . . additional evidence about the ordinary consumer’s expectation is necessary.” *Id.* (quotation marks omitted) (alteration in original). This additional evidence may include advertising or other representations

by the defendant about how a product can be used and will perform.¹ *Id.* at 79. In a design defect case, this additional evidence may consist of risk-utility balancing—proving that a practicable and feasible design alternative was available. *Id.* at 78.

b. Causation

“In addition to presenting proof as to the condition of the defendant’s product, the plaintiff in a strict liability case is required to establish that such condition proximately caused his injuries or damages.” *Gilmour v. Norris Paint & Varnish Co.*, 52 Or. App. 179, 184 (1981) (quotation marks omitted); *see also Edmons v. Home Depot, U.S.A., Inc.*, 2011 WL 127165, at *8 (D. Or. Jan. 14, 2011) (same); *McCathern*, 332 Or. at 77 n.15 (noting that causation is a required element in a strict product liability case). “This requires that a plaintiff ‘introduce evidence which affords a reasonable basis for the conclusion that it is more likely than not that the conduct of the defendant was a substantial factor in the result. A mere possibility of such causation is not enough’” *Edmons*, 2011 WL 127165, at *8 (quoting *Hall v. Baxter Healthcare Corp.*, 947 F. Supp. 1387, 1298 (D. Or. 1996)).

2. Analysis of Plaintiff’s Claim of Strict Products Liability by Defective Design

a. Causation

As an initial matter, Defendants argue that there is no genuine dispute of material fact regarding all of the grounds on which Plaintiff bases his claim for strict product liability because Plaintiff offers no evidence that his injuries were caused by a defective InvertAlign. The crux of Defendants’ argument is that their expert testified that if Plaintiff used the InvertAlign as he

¹ This is evidence from which the expectation of an ordinary consumer can be adduced, however, “such evidence by itself rarely will demonstrate that a product is defective.” *McCathern*, 332 Or. at 79.

testified, then it is impossible for the InvertAlign to have malfunctioned in the manner alleged. This, Defendants argue, shows that there is no evidence of causation.

Defendants' argument combines the analysis of whether Plaintiff's InvertAlign was defective with whether Plaintiff has shown causation. At least at summary judgment, Defendants do not dispute that Plaintiff was injured because he fell when the ankle clamps opened on his InvertAlign machine while Plaintiff was in a fully inverted position. The dispute is whether the ankle locking mechanism opened because the machine was defective or because of some other reason, such as Plaintiff's fault or negligence in securing the ankle clamps. This dispute is more appropriately addressed in the analysis of whether Plaintiff has provided sufficient evidence of a defect and is discussed below.

For purposes of causation, Plaintiff testified that he believes that he used his InvertAlign in compliance with the manufacturer's instructions, the ankle clamps unexpectedly opened, and Plaintiff fell and was injured. Hayes + Associates provides expert testimony explaining how, mechanically speaking, the accident happened and that Plaintiff's injuries were caused by a defective InvertAlign. Defendants' expert, Mr. Topinka, testified that it is impossible for the InvertAlign's ankle clamps to open under the circumstances described by Plaintiff and Hayes + Associates. Plaintiff's experts then offered supplemental testimony in opposition to Mr. Topinka's opinions. Resolving whether the accident could have occurred in the manner testified-to by Plaintiff presents a factual dispute that is for a jury to decide.

b. Allegedly Defective Design

To survive summary judgment, Plaintiff must show a genuine dispute of material fact regarding whether his InverAlign was defective—*i.e.*, whether it was in a condition not contemplated by Plaintiff and was “dangerous to an extent beyond that which would be

contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics.” *McCathern*, 332 Or. at 77 (quotation marks omitted).

Regarding ordinary consumer expectations, the belief that an inversion table would safely allow the user to perform a sit-up maneuver while fully inverted may be in the realm of a juror’s common experience. Even if it were not, however, the InvertAlign instructional video represented both visually and audibly that the InvertAlign could safely be used to perform a sit-up maneuver and other exercises from a fully inverted position. This is sufficient evidence to show a genuine dispute as to whether an ordinary consumer would expect that the InvertAlign allowed for such a maneuver.

Plaintiff also has provided sufficient evidence of a genuine dispute that his InvertAlign was unreasonably dangerous. Plaintiff testified that three days after purchasing his InvertAlign, he believed that he used it in conformance with the manufacturer’s instructions and that when he performed a sit-up maneuver, the ankle locking mechanism unexpectedly opened and he fell, resulting in his injury. Plaintiff also submitted expert testimony that the machine was defective and unreasonably dangerous. The Hayes Report and Hayes Supplemental Report are sufficient to show a genuine dispute of material fact on this issue.

The Hayes Report concludes that the pin in the InvertAlign’s ankle locking mechanism can sit between the “valley” and “peak” of the gear teeth without the user being aware of that condition. If the pin is so positioned, as opined by Plaintiff’s experts, the pin can stay that way through an inversion and then the force of a sit-up maneuver can cause pin to move and the ankle lock to open. Plaintiff’s experts also opined as to some alternative design options Defendants could have feasibly and practicably incorporated to make the InvertAlign safer, including painting red “tick marks” on the gear tooth housing so the user would know whether the pin was

fully and correctly seated, and not unsafely positioned between the gear teeth, or connecting the ankle locking pin to the tilt mechanism with a cable, so that the table would not be able to incline unless the locking pin is correctly seated.² The Hayes Report also concluded that Plaintiff's injuries could have been mitigated or eliminated by incorporating fail-safe mechanisms into the InvertAlign's design, such as decreasing the vertical clearance from the fully inverted position, so there would be a shorter drop if the ankle lock opened, and having a padded surface installed across the base of the table. This evidence, as well, is sufficient to defeat summary judgment. *See, e.g., Hill v. Tech. Chem. Corp.*, 2006 WL 2792183, at *2-3 (D. Or. 2006) (finding sufficient to defeat summary judgment an expert report stating that alternative mechanisms would have mitigated the incident) (citing *McCathern*, 322 Or. at 81-82 for the proposition that "[e]vidence from which a jury could infer that a change in design would have been effective in preventing the accident is sufficient to create an issue of fact").³

² The Hayes Report also opined that there were safer alternate designs of the part of the InvertAlign that holds the user's ankles, suggesting a "gravity boot" system or a "C clamp" system instead of the InvertAlign's foam padded bar that sits on top of the foot. Based on the current record, the Court does not consider these to be relevant alternative, safer designs because the alleged defect in this case is not that Plaintiff's feet were able to slip out from behind the ankle bars while the locking mechanism remained closed, but that the locking mechanism improperly opened and released. Further, Plaintiff's experts do not discuss the locking mechanism of these alternative designs and are silent as to whether such purportedly safer designs would prevent an ankle locking mechanism from unexpectedly opening. Thus, there is insufficient evidence that these particular designs are safer with respect to the specific injury-causing event alleged in this case.

³ Defendants also argue that the fail-safe mechanisms and alternate designs suggested in the Hayes Report are insufficient as a matter of law because Hayes + Associates did not specifically test them. Defendants rely on a case before the District of Oregon in which the reviewing judge found evidence of purported safer, alternate designs to be insufficient because, in part, the expert did not test the designs. *Edmons*, 2011 WL 127165, at *7 (quoting *Cole v. Builders Square, Inc.*, Civ. No. 99-729-PA (D. Or. May 7, 2001)). *Edmons* is distinguishable for several reasons. First, the court in *Edmons* noted that proof of a safer, alternate design is required under Oregon law—*Edmons* relied, however, on a 1978 Oregon Supreme Court decision that was issued before the Oregon Supreme Court clarified in *McCathern* that proof of a safer, alternate design is not necessarily required. *See McCathern*, 332 Or. at 78 ("We agree that

The principal disagreement at summary judgment concerns how to understand Plaintiff's deposition testimony. More than two and one-half years after the accident, Plaintiff was asked at deposition whether he used the product in accordance with the provided instructions.

Specifically, Plaintiff was asked whether, before inverting, he felt the handle "pop up" as instructed, heard the sound of the pin locking into place as instructed, pushed his legs back and forth to make sure the ankle clamp was locked as instructed, and jiggled the handle to make sure it was secure as instructed. Plaintiff testified that he did all of those things.

Based on Plaintiff's testimony, Defendants argue as their first premise that it is undisputed that the pin used in the ankle locking mechanism was correctly locked in place before Plaintiff inverted. To this, Defendants add, as their second premise, the testimony of their expert, which is unrebutted by Plaintiff's experts on this point, that it is impossible for the ankle lock mechanism unexpectedly to open or release if the pin is locked correctly in place. Thus, conclude Defendants, Plaintiff has failed to show either causation or defective design.

evidence related to risk-utility balancing, which may include proof that a practicable and feasible design alternative was available, will not *always* be necessary to prove that a product's design is defective and unreasonably dangerous, *i.e.*, that the product failed to meet ordinary consumer expectations.") (emphasis in original). Second, *Edmons* noted that "if a product's design is sufficiently straightforward, the court may itself make the determination whether an alternative design was feasible." *Edmons*, 2011 WL 127165, at *7. Here, the Court finds that the alternate designs suggested by Hayes + Associates, including lowering the vertical clearance so that a user has less distance to fall, adding padding so that a user falls on padding, painting red tick marks so that the user can see when the pin is properly seated, and attaching the locking mechanism to a cable so that the machine cannot invert unless the locking mechanism is secure, are sufficiently straightforward that the Court can determine that they are feasible without specific testing. *See Wilson v. Piper Aircraft Corp.*, 282 Or. 61, 69 (1978) ("A court and jury could infer, on the basis of common knowledge, that the addition of shoulder harnesses and improved seat belt attachments would not significantly affect the over-all engineering of the airplane and would not be unduly expensive."). Third, even if expert testimony were required to show that these alternate designs were feasible, here, unlike in *Edmons*, there is such expert testimony that the Court has found to be reliable. The fact that Hayes + Associates did not test the alternate designs may be a basis on which Defendants can impeach the expert testimony, but does not render the testimony inadmissible under the facts of this case.

The error in Defendants’ reasoning is that their first premise is not supported, or at least not compelled, by the evidence. Plaintiff’s deposition testimony does not prove, at least not beyond genuine dispute, that the pin used in the ankle locking mechanism was correctly locked in place before Plaintiff fully inverted. All that Plaintiff’s testimony proves is that Plaintiff believed it was correctly locked in place before he inverted. But that is not the same thing as proving that the pin was in fact correctly locked in place. Indeed, in light of the unrebutted testimony of Defendants’ expert on this point, it would have been impossible for the pin to have been correctly locked in place based on the fact that the ankle locking mechanism unexpectedly opened, causing Plaintiff to fall. At summary judgment, the Court must accept as true Plaintiff’s testimony that he fell after the ankle locking mechanism unexpectedly opened while he was fully inverted. There is nothing in the record to show how this accident could have occurred but for the pin not being fully and correctly locked in place, notwithstanding Plaintiff’s testimony that he believed that it was. Viewing the evidence in the light most favorable to the non-moving party, as the Court must do at this stage of the proceeding, the evidence simply shows that Plaintiff was mistaken.

In addition, Plaintiff’s experts opine that “unbeknownst” to Plaintiff, “the ankle locking pin was never in the ‘hole’ or ‘valley’ when he mounted the device and went in to a fully inverted position.” Plaintiff’s experts then provide an explanation as to how that can occur and how it can result in Plaintiff’s fall. Plaintiff’s experts also opine that Plaintiff’s injuries are fully consistent with the fall occurring as Plaintiff describes. Thus, the testimony of Plaintiff and the opinions stated in the Hayes Report are sufficient to defeat summary judgment.

CONCLUSION

Defendants’ motion for summary judgment (Dkt. 41) is GRANTED IN PART and DENIED IN PART. The motion is denied with respect to Plaintiff’s claim for strict products

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liability based on an alleged design defect and granted with respect to Plaintiff's remaining claims and theories.

IT IS SO ORDERED.

DATED this 22nd day of April, 2015.

/s/ Michael H. Simon
Michael H. Simon
United States District Judge